

Amendment to the Claims

Below is a complete listing of the claims.

1. (Withdrawn) A hand-held stun gun for incapacitating a human target by generating a series of powerful electrical output pulses across first and second spaced apart output terminals in response to closure of a trigger, comprising:
 - a. a housing for enclosing a battery power supply and for supporting the trigger and first and second output terminals; and
 - b. a power supply having an electronic switch, an energy storage capacitor and a transformer for converting low voltage, direct current from the battery power supply into a series of high voltage output pulses across the first and second output terminals, each output pulse having pulse width greater than 7.52 microseconds when the first and second output terminals are applied to the human target.
2. (Withdrawn) The stun gun of Claim 1 wherein each output current pulse transfers at least about 0.9 Joules of energy from the first and second output terminals to the human target.
3. (Withdrawn) The stun gun of Claim 1 wherein the duration of each output pulse extends from 10 microseconds to 100 microseconds.
4. (Withdrawn) The stun gun of Claim 3 further including a cartridge mechanically coupled to the stun gun housing, wherein the cartridge includes first and second spaced apart, launchable darts coupled by first and second spoolable wires to the first and second stun gun output terminals.
5. (Withdrawn) The stun gun of Claim 4 wherein the voltage level and charge stored in the energy storage capacitor is sufficient to generate pulses having an energy content of from 0.9 Joules to 10 Joules.
6. (Withdrawn) The stun gun of Claim 5 wherein the power supply produces the high voltage pulses at a pulse repetition rate of from 2 to 40 pulses per second.

7. (Withdrawn) The stun gun of Claim 6 wherein the capacitance of the capacitor is rated at or above 0.88 microFarads.
8. (Withdrawn) The stun gun of Claim 1 wherein each output pulse includes a pulse energy of from 1 to 3 Joules.
9. (Withdrawn) The stun gun of Claim 8 wherein the duration of each output pulse extends from 10 microseconds to 100 microseconds.
10. (Withdrawn) The stun gun of Claim 9 wherein the power supply produces the high voltage pulses at a pulse repetition rate of from 2 to 40 pulses per second.
11. (Withdrawn) The stun gun of Claim 10 wherein the capacitance of the capacitor is rated at or above 0.88 microFarads.
12. (Cancelled)
13. (Currently amended) A method performed by a weapon, the weapon for ~~incapacitating~~ halting locomotion by a human or animal target, the method comprising:
 - a. charging a ~~capacitor~~ capacitance of the weapon; and
 - b. discharging 0.75 to 10 joules from the capacitor capacitance for 9 to 100 microseconds into through a transformer of the weapon to generate a pulse to be conducted through tissue of the ~~human target, wherein the pulse has a pulse width from 9 to 100 microseconds and wherein charging provides from 0.8 to 10 joules of energy stored by the capacitor per pulse target; whereby 2 to 40 of the pulses per second when conducted through~~ tissue of the target halts locomotion by the target.
14. (Cancelled)

15. (Previously presented) The method of Claim 13 wherein the pulse provides from 1 to 3 joules of energy into a provided resistance of 1000 ohms.

16. (Withdrawn) A hand-held stun gun for generating a series of powerful electrical output pulses across first and second spaced apart output terminals in response to closure of a trigger, comprising:

a. a housing for enclosing a battery power supply and for supporting the trigger and first and second output terminals;

and

b. a power supply having an electronic switch, an energy storage capacitor and a transformer for converting low voltage, direct current from the battery power supply into a series of high voltage output pulses across the first and second output terminals, each output pulse having a pulse greater than 7.52 microseconds when the first and second output terminals are applied to a human target.

17. (Withdrawn) A hand-held stun gun as in Claim 1 in which said pulses are further characterized as having a pulse energy of from 0.9 Joules to 10 Joules and an RMS current flow of from 100 milliamps to 500 milliamps.

18. (Currently amended) A method performed by a weapon, the weapon for ~~incapacitating~~ halting locomotion by a human or animal target, the method comprising:

a. charging a ~~capacitor~~ capacitance of the weapon; and

b. discharging the ~~capacitor~~ capacitance through a transformer of the weapon to generate in a secondary of the transformer a current comprising a recurring pulse to be conducted through tissue of the ~~human~~ target, wherein each recurring pulse has a pulse width from 9 to 100 microseconds and wherein the current has a magnitude of from 100 to 500 milliamps RMS; whereby 2 to 40 of the pulses per second when conducted through tissue of the target halts locomotion by the target.

19. (Withdrawn) A hand-held stun gun as in Claim 16, in which said output pulses are further characterized as having an energy of from 0.9 Joules to 10 Joules and an RMS current flow of from 100 milliamps to 500 milliamps.

20. (Currently amended) The method of claim 13 wherein ~~charging~~ discharging provides from 1.5 to 5 joules of energy ~~stored by~~ from the capacitor capacitance per pulse.

21. (Currently amended) The method of claim 18 wherein the current has a magnitude of from 100 to 500 milliamps RMS through a provided resistance of 1000 ohms in place of the target.

22. (Currently amended) A method ~~performed by a weapon, the weapon for producing contractions in skeletal muscles of a provided target to halt~~ for halting locomotion by the a human or animal target, the method comprising:

generating passing a current to be conducted through tissue of the target, wherein the current comprises a plurality of recurring pulses during a period, ~~wherein~~ each recurring pulse has a pulse width of from 9 to 100 microseconds, and each pulse has from 0.75 to 10 joules of energy; whereby the plurality of pulses when passed through tissue of the target halts locomotion by the target.

23. (Cancelled)

24. (Currently amended) The method of claim 22 wherein each recurring pulse has an energy of from 0.9 to 10 joules into a provided resistance of 1000 ohms.

25. (Previously presented) The method of claim 22 wherein each recurring pulse has an energy of from 1 to 3 joules.

26. (Previously presented) The method of claim 22 wherein each recurring pulse has an energy of from 1 to 3 joules into a provided resistance of 1000 ohms.

27. (Previously presented) The method of claim 22 wherein the current has a magnitude of from 100 to 500 milliamps RMS for the period.
28. (Previously presented) The method of claim 22 wherein the current has a magnitude of from 100 to 500 milliamps RMS for the period through a provided resistance of 1000 ohms.
29. (Currently amended) The method of claim 22 wherein each recurring pulse is generated from stored energy, the energy having a magnitude of from ~~0.8~~ 0.75 to 10 joules per pulse.
30. (Currently amended) The method of claim ~~22~~ 25 wherein each recurring pulse is generated from stored energy, the energy having a magnitude of from 1.5 to 5 joules per pulse.
31. (Previously presented) The method of claim 22 wherein the plurality of recurring pulses has a pulse repetition rate of from 2 to 40 pulses per second.
32. (Previously presented) The method of claim 22 wherein the plurality of recurring pulses has a pulse repetition rate of from 5 to 15 pulses per second.
33. (New) The method of claim 13 further comprising repeating discharging to generate respective pulses at a rate of from 5 to 15 pulses per second.
34. (New) The method of claim 13 wherein the capacitance comprises a capacitor of about 0.88 microfarads.
35. (New) The method of claim 13 wherein discharging begins after a voltage across the capacitance is about 2000 volts.
36. (New) The method of Claim 13 wherein the pulse provides a pulse width greater than 10 microseconds into a provided resistance of 1000 ohms.

37. (New) The method of claim 13 wherein the pulse provides a pulse width of about 13 microseconds into a provided resistance of 1000 ohms.
38. (New) The method of claim 13 further comprising repeating discharging to generate respective pulses that provide a current of 100 to 500 milliamps RMS into a provided resistance of 1000 ohms.
39. (New) The method of claim 13 further comprising repeating discharging to generate respective pulses that provide a current greater than 100 milliamps RMS into a provided resistance of 1000 ohms.
40. (New) The method of claim 13 further comprising repeating discharging to generate respective pulses that provide a current of about 162 milliamps RMS into a provided resistance of 1000 ohms.
41. (New) The method of claim 18 wherein at least one of the recurring pulses has an energy of 0.75 to 9 joules.
42. (New) The method of claim 18 wherein at least one of the recurring pulses has an energy of 0.75 to 9 joules into a provided resistance of 1000 ohms.
43. (New) The method of claim 18 wherein at least one of the recurring pulses has an energy of 1 to 3 joules.
44. (New) The method of claim 18 wherein at least one of the recurring pulses has an energy of 1 to 3 joules into a provided resistance of 1000 ohms.
45. (New) The method of claim 18 wherein the recurring pulses provide a current greater than 100 milliamps RMS into a provided resistance of 1000 ohms.

46. (New) The method of claim 18 wherein the recurring pulses provide a current of about 162 milliamps RMS into a provided resistance of 1000 ohms.
47. (New) The method of claim 18 wherein at least one of the recurring pulses has a pulse width of about 13 microseconds.
48. (New) The method of claim 18 wherein at least one of the recurring pulses has a pulse width of about 13 microseconds into a provided resistance of 1000 ohms.
49. (New) The method of claim 22 wherein at least one of the recurring pulses has a pulse width from 9 to 100 microseconds into a provided resistance of 1000 ohms.
50. (New) The method of claim 22 wherein at least one of the recurring pulses has from 0.75 to 10 joules of energy into a provided resistance of 1000 ohms.
51. (New) The method of claim 22 wherein the recurring pulses provide a current greater than 100 milliamps RMS into a provided resistance of 1000 ohms.
52. (New) The method of claim 22 wherein the recurring pulses provide a current of about 162 milliamps RMS into a provided resistance of 1000 ohms.